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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,837	11/21/2003	J. Eric Lauritzen	CRUI/0008	3620

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EXAMINER

BATES, ZAKIYA W

ART UNIT PAPER NUMBER

3676

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/720,837

Applicant(s)

LAURITZEN ET AL.

Examiner

Zakiya W. Bates

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 61-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20, 22-30, 32-37, 43-45, 47-51, 53 and 55-60 is/are rejected.
- 7) ☒ Claim(s) 13, 21, 31, 38-42, 46, 52 and 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06212004, 10122004, 03172005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-60, drawn to a method and apparatus for removing fluid from the well, classified in class 166, subclass 369.
  - II. Claims 61-71, drawn to a downhole pump, classified in class 417, subclass 321.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination calls for a mere pump. The subcombination has separate utility such as pumping chemicals or homogeneous fluids to/from downhole.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Walter Grollitsch on 11/4/05 a provisional election was made with traverse to prosecute the invention of group I, claims 1-60.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 61-71 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-12, 14-20, 22-30, 32, 33, 36, 37, 43-45, 47-51, 53, and 55-60 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,691,781.

US 6,691,781 discloses a method that includes, with respect to claim 1, a method of removing produced fluid from a well producing both gas 20 and liquid 18, the method comprising; utilizing produced gas flowing from a formation to power a produced liquid pump 78; and carrying the produced liquid from the pump and the produced gas towards surface in separate fluid streams. With respect to the depending claims, the reference teaches the limitations as claimed, including safety valve (not shown) and artificial gas lift 58. With respect to claim 25, the reference discloses a method of bullheading a gas-producing well containing liquid, the method comprising: pumping gas 30 into a well to force liquid lying in the well back into a formation; then allowing gas 20 to flow from the formation to power a liquid pump 78; and carrying gas, and liquid from the pump, towards surface in separate fluid streams. See Fig. 1. With respect to claim 27, the reference discloses a method of bullheading a gas producing well containing liquid, the method comprising: pumping gas 30 into a well to displace liquid lying in the well towards surface; then once the level of liquid in the well has fallen below a predetermined level allowing produced gas 20 to flow and power a liquid pump 78; and carrying gas 20 and liquid 18 from the pump towards surface in separate fluid streams. With respect to claim 28, the reference discloses an apparatus for location in a well bore for use in removing produced fluid from a well producing both gas 20 and liquid 18, the apparatus comprising: a produced liquid pump 78 for location in a well bore and adapted to be powered by produced gas flowing from a producing formation;

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and a conduit for carrying produced liquid from the pump towards surface. See Figs. 1 and 3. With respect to the depending claims, the reference teaches the limitations as claimed, including co-mingling (in 80) and restriction, a separator 10, a pump with turbine 26, and at least one further liquid pump 64. With respect to claim 56, the reference discloses a method of removing fluid from a well! the method comprising: locating a pump 78 in a well containing both gas and liquid; driving the pump to pump liquid towards surface; carrying gas and the liquid towards surface in separate fluid streams', and then co-mingling the separate fluid streams (in 80). With respect to the depending claim, the reference teaches the limitations as claimed. With respect to claim 58, the reference discloses an apparatus for location in a well bore for use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a pump 78 for location in a well bore; a conduit for carrying liquid from the pump towards surface; and means (in 80) for co-mingling liquid from the conduit with gas in the well bore. With respect to claim 59, the reference discloses a method of removing fluid from a well, the method comprising: carrying gas and liquid from a well towards surface in separate fluid streams; and then co-mingling (in 80) the separate fluid streams. With respect to claim 60, the reference discloses an apparatus for location in a well bore for use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a conduit (100/102/104) for carrying liquid towards surface through a well bore separately of a gas stream; and means (in 80) for co-mingling liquid from the conduit with gas in the well bore.

10. Claims 28-30, 49, 50, and 56-60 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,026,904.

US 6,026,904 discloses, with respect to claim 28, an apparatus for location in a well bore for use in removing produced fluid from a well producing both gas and liquid, the apparatus comprising: a produced liquid pump 40 for location in a well bore and adapted to be powered by produced gas flowing from a producing formation; and a conduit 17 for carrying produced liquid from the pump towards surface. See Figs. 1 and 5-6. With respect to the depending claims, the reference teaches the limitations as claimed, including co-mingling means 30 and restriction 44c. With respect to claim 56, the reference discloses a method of removing fluid from a well! the method comprising: locating a pump 40 in a well containing both gas and liquid; driving the pump to pump liquid towards surface; carrying gas and the liquid towards surface in separate fluid streams', and then co-mingling the separate fluid streams (in 44c). With respect to the depending claim, the reference teaches the limitations as claimed. With respect to claim 58, the reference discloses an apparatus for location in a well bore for use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a pump 40 for location in a well bore; a conduit 17 for carrying liquid from the pump towards surface; and means (in 44c) for co-mingling liquid from the conduit with gas in the well bore. With respect to claim 59, the reference discloses a method of removing fluid from a well, the method comprising: carrying gas and liquid from a well towards surface in separate fluid streams; and then co-mingling (in 44c) the separate fluid streams. With respect to claim 60, the reference discloses an apparatus for location in a well bore for

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use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a conduit 14 for carrying liquid towards surface through a well bore separately of a gas stream; and means (in 44c) for co-mingling liquid from the conduit with gas in the well bore.

11. Claims 1-11, 15, 18, 23, 27-30, 32-36, 49, 50, and 56-60 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,565,496.

US 4,565,496 discloses a method that includes, with respect to claim 1, a method of removing produced fluid from a well producing both gas and liquid, the method comprising; utilizing produced gas flowing from a formation to power a produced liquid pump 40; and carrying the produced liquid from the pump and the produced gas towards surface in separate fluid streams 16, 18. With respect to the depending claims, the reference teaches the limitations as claimed, including valves 50, 58, commingle means (in 52), and piston, rotary, or reciprocating pump. With respect to claim 27, the reference discloses a method of bullheading a gas producing well containing liquid, the method comprising: pumping gas F into a well to displace liquid lying in the well towards surface; then once the level of liquid in the well has fallen below a predetermined level allowing produced gas G to flow and power a liquid pump 40; and carrying gas G and liquid L from the pump towards surface in separate fluid streams 16, 18. With respect to claim 28, the reference discloses an apparatus for location in a well bore for use in removing produced fluid from a well producing both gas and liquid, the apparatus comprising: a produced liquid pump 40 for location in a well bore and adapted to be powered by produced gas G flowing from a producing



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formation; and a conduit 18 for carrying produced liquid from the pump towards surface.

See Figs. 1 and 2. With respect to the depending claims, the reference teaches the limitations as claimed, including co-mingling (in 52) and restriction, a separator S, and valves 50, 58. With respect to claim 56, the reference discloses a method of removing fluid from a well! the method comprising: locating a pump 40 in a well containing both gas and liquid; driving the pump to pump liquid L towards surface; carrying gas G and the liquid towards surface in separate fluid streams 16, 18', and then co-mingling the separate fluid streams. With respect to the depending claim, the reference teaches the limitations as claimed. With respect to claim 58, the reference discloses an apparatus for location in a well bore for use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a pump 40 for location in a well bore; a conduit for carrying liquid from the pump towards surface; and means (in 52) for co-mingling liquid from the conduit with gas in the well bore. With respect to claim 59, the reference discloses a method of removing fluid from a well, the method comprising: carrying gas and liquid from a well towards surface in separate fluid streams; and then co-mingling (in 52) the separate fluid streams. With respect to claim 60, the reference discloses an apparatus for location in a well bore for use in removing fluid from a well containing both gas and liquid, the apparatus comprising: a conduit for carrying liquid towards surface through a well bore separately of a gas stream; and means (in 52) for co-mingling liquid from the conduit with gas in the well bore.

***Allowable Subject Matter***

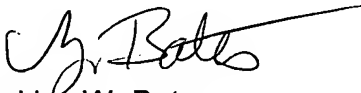
12. Claims 13, 21, 31, 38-42, 46, 52, and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya W. Bates whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Zakiya W. Bates  
Primary Examiner  
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